Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (original) An air seal for use in a gas turbine engine having improved durability, comprising:

a seal substrate; and

an abradable seal layer on the seal substrate, said abradable seal layer being composed of a densified polyimide foam.

Claim 2. (original) An air seal according to claim 1, wherein said abradable seal layer has at least one layer of said densified polyimide foam.

Claim 3. (original) An air seal according to claim 1, wherein said abradable seal layer comprises a plurality of layers of said densified polyimide foam.

Claim 4. (original) An air seal according to claim 1, wherein said polyimide foam has a density of at least 10 pounds per cubic foot.

Claim 5. (original) An air seal according to claim 1, wherein said polyimide foam has a density of at least 15 pounds per cubic foot.

Claim 6. (original) An air seal according to claim 1, wherein said polyimide foam has a density in the range of from 12 pounds per cubic foot to 25 pounds per cubic foot.

Claim 7. (original) An air seal according to claim 1, wherein said polyimide foam has a shear strength of 140 psi to about 325 psi.

Claim 8. (original) An air seal according to claim 1, wherein said seal substrate comprises a polymer composite.

Claim 9. (original) An air seal according to claim 1, wherein the air seal is an outer air seal.

Claim 10. (original) An air seal according to claim 1, wherein the air seal is a knife edge seal.

Claim 11. (original) An air seal according to claim 1, wherein the densified polyimide foam is a thermomechanically densified polyimide foam.

Claim 12. (original) A gas turbine engine seal system comprising:

a seal assembly having a seal substrate and an abradable seal material applied to a bond layer;

said abradable seal material being composed of a densified polyimide foam; and

an engine component adapted for motion relative to the seal assembly and having an abrasive portion interacting with the abradable seal material, whereby the abrasive portion of the engine component and the abradable seal material of the seal assembly cooperate to provide sealing.

Claim 13. (original) A gas turbine engine seal system according to claim 12, wherein said seal substrate comprises a stator box and said engine component comprises a disk.

Claim 14. (original) A gas turbine engine seal system according to claim 12, wherein said seal substrate comprises a portion of a case and said engine component comprises a rotatable vane.

Claim 15. (original) A gas turbine engine seal system according to claim 12, wherein:

said engine component forms part of an engine having a centerline;

said abradable seal material comprises a plurality of laminated layers of said polyimide foam having a lamination plane; and

said lamination plane is substantially perpendicular to said centerline.

Claim 16. (previously presented) A gas turbine engine seal system comprising:

a seal assembly having a seal substrate and an abradable seal material applied to a bond layer;

said abradable seal material being composed of a densified polyimide foam;

an engine component adapted for motion relative to the seal assembly and having an abrasive portion interacting with the abradable seal material, whereby the abrasive portion of the engine component and the abradable seal material of the seal assembly cooperate to provide sealing;

said engine component forming part of an engine having a centerline;

said abradable seal material comprising a plurality of laminated layers of said polyimide foam having a lamination plane;

said lamination plane being substantially perpendicular to said centerline; and

said lamination plane being substantially parallel to a radial direction of said engine and substantially perpendicular to an axial direction of said engine.

Claim 17. (original) A gas turbine engine seal system according to claim 12, wherein said seal substrate comprises a component formed from a polymer composite.

Claim 18. (original) A gas turbine engine seal system according to claim 12, wherein said densified polyimide foam comprises a thermomechanically densified polyimide foam.

Claim 19. (original) A gas turbine engine seal system according to claim 12, wherein said polyimide foam has a density of at least 10 pounds per cubic foot.

Claim 20. (original) A gas turbine engine seal system according to claim 12, wherein said polyimide foam has a density of at least 15 pounds per cubic foot.

Claim 21. (original) A gas turbine engine seal system according to claim 12, wherein said polyimide foam has a density in the range of from 12 pounds per cubic foot to 25 pounds per cubic foot.

Claim 22. (original) A gas turbine engine seal system according to claim 12, wherein said polyimide foam has a shear strength in the range of 140 psi to 325 psi.

Claim 23. (original) A gas turbine engine seal system according to claim 12, wherein said bond layer is formed by at least one adhesive strip.

Claim 24. (original) A gas turbine engine seal system according to claim 12, wherein said bond layer is formed by a layer of adhesive material.

Claims 25-44 (cancelled)

Claim 45. (new) An air seal for use in a gas turbine engine having improved durability, comprising:

a seal substrate; and

an abradable seal layer on the seal substrate, said abradable seal layer consisting of a densified polyimide foam.